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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,658	12/30/2003	Golchehreh Salamat	560773	1657
27452	7590	12/06/2006	EXAMINER	
SCHLUMBERGER TECHNOLOGY CORPORATION IP DEPT., WELL STIMULATION 110 SCHLUMBERGER DRIVE, MD1 SUGAR LAND, TX 77478			COY, NICOLE A	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/707,658

Applicant(s)

SALAMAT, GOLCHEHREH

Examiner

Nicole Coy

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parlar et al. (USP 6,631,764) in view of Fischer et al. (USP 3,753,903).

With respect to claims 1 and 2, Parlar et al. teaches a method of gravel packing a hole in subterranean formation including the step of pumping into the hole a gravel pack composition comprising gravel and a brine-in-oil emulsion carrier fluid (see column 8 lines 18-22). Parlar et al. further teaches an emulsion stabilized by an emulsifier based on a fatty acid ester (see column 8 line 21).

However, Parlar et al. is silent as to the specific fatty acid ester. Fischer et al. teaches that useful oil-soluble emulsifiers include sorbitan monooleate and sorbitan trioleate (see column 6 lines 32-35). Fischer et al. teaches that these sorbitan fatty acid esters are added to the carrier fluid in order to stabilize it (see column 6 line 23). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Parlar et al. by selecting sorbitan monooleate and sorbitan trioleate as the specific fatty acid ester as taught by Fischer et al. in order to form a stable carrier fluid.

Furthermore, the emulsion solution of Parlar et al. in view of Fischer et al. is that which is recited in claim 1, and therefore would present a shoulder peak before the monomer peak when analyzed by gel permeation chromatography.

With respect to claim 3, the ratio between the peak height of the earlier and later peak would inherently be greater than 0.5 as the emulsion solution of Parlar et al. in view of Fischer et al. is substantially identical to the claimed emulsion.

With respect to claim 4, Parlar et al. teaches a brine solution of 50 % (see column 8 table 1).

With respect to claim 5, Parlar et al. teaches the aqueous phase of the carrier fluid comprising a chelating agent (see column 3 lines 29-34).

With respect to claim 6, Parlar et al. teaches examples of chelating agents, such as EDTA, CDTA, EGTA, HEDTA, and HEIDA (see column 3 lines 34-47).

With respect to claim 7, the aqueous phase is capable of being solids-free (see column 7 lines 36-49).

With respect to claim 8, Parlar et al. teaches that the aqueous phase comprises a pH-modifier and a dissolver (see column 7 lines 36-49).

### ***Response to Arguments***

3. Applicant's arguments filed 10/3/06 have been fully considered but they are not persuasive. Applicant argues that Fischer teaches a mixture of two emulsifiers: an oil-soluble emulsifier and a water-soluble emulsifier and provides no option to consider using anything different than a mixture of emulsifiers. However, the Fischer reference is

Art Unit: 3672

a secondary reference being used to show a specific type of fatty acid (sorbitan) that works well in the oil-soluble emulsifier of Parlar et al. The Examiner is not asserting that Fischer teaches a brine-in-oil emulsion stabilized by a brine-in-oil emulsion forming emulsifier. As noted above, Parlar et al. teaches a brine-in-oil emulsion stabilized by a fatty acid ester. However, Parlar et al. is silent as to the type of fatty acid ester. Fischer et al. teaches that sorbitan is a type of fatty acid ester used to stabilize an oil-soluble emulsion. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Parlar et al. by selecting sorbitan monooleate and sorbitan trioleate as the specific fatty acid ester as taught by Fischer et al. in order to form a stable carrier fluid.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3672

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405.

The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nac

  
William Neuder  
Primary Examiner